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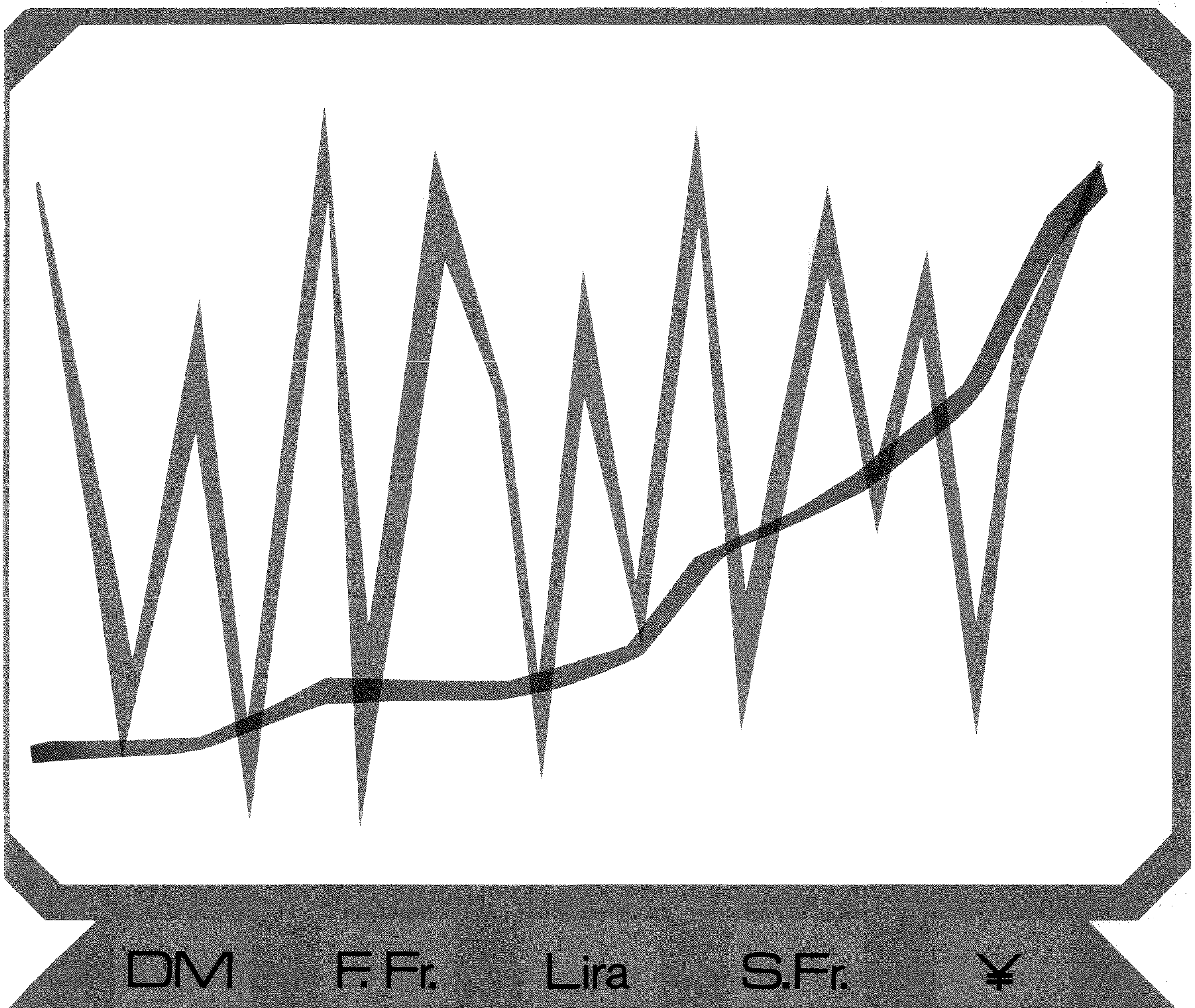

MONEY, PRICES, AND EXCHANGE RATES

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Money, Prices and Exchange Rates

The newspapers and academic journals are full of theories (sometimes contradictory theories) which attempt to explain each striking new development occuring in this era of rapidly rising prices and wildly fluctuating exchange rates. Consider, for example, several important policy-oriented questions which have arisen during the past year or two. What is the basic underlying rate of inflation? Do speculative influences explain the steep drop in the dollar's value during the 1977-78 period? Or has the very strength of the U.S. economy led to the decline in the value of the nation's currency? The task of analysis, as the following articles indicate, is to apply sophisticated tests to the available statistical evidence, as a means of devising correct answers to these questions—and therefore correct policy solutions to the nation's problems.

In analyzing the recent inflation, John Scadding says, "Only the systematic changes in prices are of any use in forecasting future prices; by definition, the unsystematic, transitory changes contain no information about the future course of prices." He then presents a model of how individuals might rationally extract information about the underlying inflation rate from observed price changes, and then use that information to forecast future prices.

Scadding argues that successively higher levels of inflation have become imbedded in the economy since 1960. The underlying inflation rate fluctuated around 1.7 percent until the late 1960's, averaged about 4.8 percent in the 1971–73 period, and hovered around 7.0 percent in the expansion of the late 1970's. "Neither the 1969–70 nor the 1973–75 recession made a sizable dent in the underlying rate; the most they seemed capable of doing was to stabilize the inflation rate until some new disturbance carried it to a higher plateau."

The ingrained rate of inflation currently perceived by the market is very high by historical standards, and has stubbornly remained at this level throughout the current expansion. "This persistence of a high perceived underlying inflation rate doubtless has given inflation an important momentum of its own as market participants, in an effort to protect themselves against future inflation, build this perception into their wage and price demands."

This point leads Scadding to a second important conclusion—"Even if aggregate demand growth could be moderated, pressure for price and wage increases would continue to emanate from the cost side for a considerable time." The implication for the real economy is not reassuring, since output and employment may have to remain below normal levels for a fairly protracted time if any significant progress is to be made against inflation.

Michael Keran, in his contribution, analyzes the reasons for the decline in the international value of the dollar over the 1977–78 period. He quickly dismisses the popular impression that the dollar was driven down by speculators with a vested interest in an undervalued dollar, noting that speculation tends to drive the value of a currency towards a long-run equilibrium value determined by economic fundamentals. Those speculators who most clearly perceive the underlying fundamentals and accordingly take a position in the exchange market will generally make the most profits, while those speculators who go against the fundamentals will generally lose money. Because of this self-selection process, the observed value of the dollar should not deviate significantly from the level consistent with economic fundamentals for more than a short period of time.

Keran concentrates on explaining movements in the exchange value of the dollar against the currencies of seven other major industrial countries in the 1974–79 period of flexible exchange rates. He first summarizes the apparent monetary-policy considerations which shaped monetary developments during this period. Then he shows that actual changes in the "excess money supply"—nominal money supply less real money demand—led to changes in prices and exchange rates in a way consistent with economic theory and empirical statistical tests. He bases his analysis on two propositions: 1) the exchange rate between two domestic currencies will adjust to reflect changes in the relative domestic purchasing power of the currencies; and 2) domestic monetary developments are a major determinant of domestic inflation rates, and thus of the domestic purchasing power of a given currency.

Keran estimates his equations with two alternative measures—money, and money plus quasi-money. The former is the narrow definition of money including currency and demand deposits. This primarily satisfies the means-of-payment motive for holding money. The latter is the broader definition which includes currency, demand deposits and quasi-monetary deposits of commercial banks. This measure includes a substantial store-of-value motive for holding money. Both definitions provided statistically significant results, although the broader measure gave generally superior results. "Given the dollar's role as both an international means of payment and store of value, the superiority of the broader measure of money is not surprising."

Keran concludes that an important share of the exchange-rate movements since 1975 can be explained by monetary factors, rather than by speculation or changes in such real factors as the terms of trade. His study also implies that foreign-exchange markets adjust much more quickly than domestic commodity markets to changes in domestic monetary conditions. Because these exchange rate changes can affect the dollar price of internationally traded goods, the emergence of flexible exchange rates can shorten the lag between money and prices.

Michael Bazdarich raises the question of whether the recent strength in the U.S. economy has led to the weakness of the dollar. According to the theory in question, fast economic growth in a country causes an acceleration in its imports and therefore a deterioration in its trade balance. This ultimately would lead to a depreciation of the domestic currency.

Bazdarich questions this approach, arguing instead that true economic growth, as evidenced by rapid growth in productive capacity, or potential GNP, typically strengthens the domestic currency. "Growth of this type implies improving supply and wealth conditions, which can more than offset the effects of rising demand on the trade balance. Sharp cyclical increases in GNP, on the other hand, can weaken the domestic currency. These movements typically involve an increase in demand with no change in productive capacity, and so do not generate any offsetting effects to the rise in imports."

Bazdarich argues that the popular analysis has missed this important distinction. His statistical tests indicate no support for the argument that truly strong growth in an economy will necessarily tend to weaken exchange rates. "Indeed, recent U.S. evidence suggests that the opposite has been the case. The 'strong economy, weak currency' explanation of the dollar's decline thus does not appear to have any hard theoretical or empirical evidence to support it." Bazdarich's findings—which parallel Keran's—suggest that recent GNP increases have been mostly cyclical, caused perhaps by an overly expansionary policy, and for that reason have been associated with a falling dollar.